# Coastal Resiliency Projects FAOs

## SUFFOLK COUNTY EXECUTIVE STEVE BELLONE



## Q: Why do we need to do something about Suffolk County's water quality?

**A:** Nearly 75% of homes in Suffolk County are on cesspools or septic systems, which are not equipped to effectively decontaminate human waste.

The impact of untreated waste has spurred harmful algal blooms that has reduced our protective wetlands by one-third and sea grass by 90%, which form Long Island's second line of defense against potential storms and natural disasters. With Superstorm Sandy, Suffolk County experienced devastation to life and property that could have been mitigated with the robust wetlands that once surrounded us. By installing more sewers and advanced wastewater treatment systems, Suffolk County seeks to restore this natural shield.

## Q: What are the four proposed projects and how do they lay the groundwork for future extensions?

**A:** The following four projects will address storm impacts and reduce nitrogen pollution in the Great South Bay and connected surface waters.

Around Mastic: Parcels in the Forge River area will be connected to a new sewer collection system that will flow to a new wastewater treatment plant located on municipal property near the Brookhaven Town Airport.

Around North Babylon and West Babylon: Parcels in the Carlls River area will be connected to the Bergen Point sewer system within the Southwest Sewer District.

Around Great River: Parcels in the Connetquot River and Nicoll Bay area will be connected to the Bergen Point sewer system.

Around Patchogue: Parcels in the Patchogue River area will be connected to the Patchogue sewer system within the Patchogue Sewer District.

### Q: Why were these projects chosen?

**A:** These projects are the first major investment in advanced wastewater treatment in decades. The installation of these projects will reduce the amount of nitrogen pollution. The project areas were chosen based on the potential to reduce nitrogen to surface and ground waters and improve resiliency for the region.

The reduction in nitrogen pollution due to these wastewater upgrades will improve conditions for wetlands and eelgrass, which act as buffers for storm surges, to increase our resiliency against future storms like Superstorm Sandy. Moreover, the upgrades will also contribute to important ancillary benefits, including to improve overall aquatic health, mitigating low-dissolved oxygen, reducing brown and red tides and enabling the restoration of the multi-million dollar shellfish and tourism industry.

"Water is at the heart of Suffolk County, and its water quality directly impacts the lifestyle, health, economy and resiliency of the County's 1.5 million residents, as well as its five million annual visitors."

### -IBM, Smarter Cities Challenge, June 2014

"Given the nexus between nitrogen enrichment, the long-term sustainability of salt marshes along the south shore of Long Island, and the ability of the marshes to provide protection against coastal flooding, New York State should consider supporting an array of programs to reduce nitrogen loadings into Long Island's south shore embayments, including Jamaica Bay. Actions to restore marshes so as to increase coastal resiliency may be unsuccessful unless accompanied by actions to reduce overall nitrogen loadings. Projects that have the potential to remove significant concentrations of nitrogen ... could be an appropriate focus of disaster recovery and coastal resiliency efforts."

-NYS Dept. of Environmental Conservation Technical Report, Nitrogen Pollution and Adverse Impacts on Resilient Tidal Marshlands, April 2014

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### Q: What is the timeline for these projects?

**A:** Once construction begins, the projects will be implemented over an approximate 5 year timeline according to funding requirements by New York State. This will be the first major sewering-based project in Suffolk County in more than 30 years.

### Q: How will this help create jobs and boost our economy?

**A:** In 2012, researchers at the College of William and Mary's Thomas Jefferson Program in Public Policy conducted a comprehensive analysis of the economic impact of sewer infrastructure spending. This study found the following:

- In the short-term, funds spent on infrastructure produces roughly double the initial spending in ultimate economic output.
- Over a twenty-year period, generalized 'public investment' generates an accumulated \$3.21 of economic activity per \$1.00 spent.
- Over twenty years, investing \$1.00 in sewer systems and water infrastructure returns \$.68 in tax revenue to state/local governments.
- Source: Isabelle Cohen, Thomas Freiling, Eric Robinson, The Economic Impact and Financing of Infrastructure Spending College of William and Mary, (Williamsburg, Virginia: 2012).

## Q: How will this improve my home value and quality of life?

**A:** These projects are projected to increase the average property value up to \$50,000-\$60,000. Homeowners who participate will contribute approximately 15% of the total cost over the financing period.

### Q: How much is this going to cost me?

**A:** Without this grant, the cost for these upgrades would range from \$50,000-\$72,000 for homeowners in upfront cost, plus the cost of ongoing maintenance. However, with the grant, there will be zero upfront cost to homeowners who will only be charged the costs of maintenance for a sewer district, which is approximately \$700 per year.

The majority of the parcels that need to be sewered have pre-existing, non-conforming, substandard septic systems in high priority, sensitive areas. Aging systems require an increased expense for pump-out and rehabilitation, which can cost \$600-\$800 per event. These events can occur every one to two years, or more frequently as a system approaches failure. Eventually, these systems fail and require either an upgrade or total replacement, which will cost an average homeowner upwards of \$7,000 while not increasing the value of the home and not approaching the water quality benefits of being connected to a sewer district.

#### Q: What will happen if we do not act?

**A:** If we do not act now, we will be even more vulnerable to damage caused by future storms and natural disasters, like Superstorm Sandy. Furthermore, we will continue to see the demise of our natural resources, quality of life, tourism industry, shellfish industry and property values.

For more information, e-mail Resiliency@SuffolkCountyNY.gov